

REMARKS

[1-2] Claims 1-6 and 16-18 were rejected under § 102(b) as anticipated by Strifler '404. This rejection is respectfully traversed. The rejected independent claims 1 and 21 include a feature that is recited, e.g., in claim 21 as

calculating an amount of fuel already consumed in excess due to the operation which worsens fuel economy by subtracting the amount of fuel which would have been consumed had the operation which worsens fuel economy not been performed from the actual amount of consumed fuel.

(Emphasis added.) The result is shown to the driver (claim 1).

With respect, Strifler does not disclose this feature. The Examiner is invited to consider the following points:

(1) Strifler predicts a consumption difference ΔQ in the future, that is, a difference which can be expected if the gearshift recommendation is followed. The instant claims, in contrast, recite computing excess fuel consumption Q_{ex} that has already actually been consumed in the past. Strifler's consumption difference ΔQ is an expected value, and may differ from the fuel that is actually consumed later on.

That Strifler predicts future fuel consumption is seen throughout its disclosure, which recites, for example (emphases added below):

- “a direct measure of the reduction which *would be* obtained if the gearshift recommendation were followed” (Abstract);
- “informing the driver of fuel utilization *to be expected* if another gear were selected” (col. 1, line 12);
 - “an output signal correlated with the instantaneous fuel consumption ... [a] unit ... to emit an indicating signal informing the driver of the fuel utilization *to be expected* if another gear were selected” (col. 2, lines 63-67);

- “consumption-reduction ... which *would be* obtained” (col. 3, line 11);
- “difference in fuel consumption which *would result*” (col. 3, line 22);
- “consumption to be expected if the gearshift recommendation *were followed*” (col. 3, line 61);
- “output signal, proportional to the fuel consumption which *would result*” (col. 4, line 13);
- “fuel consumption which *would result*” (col. 4, lines 25, 27, and 29);
- “fuel consumption he should expect *if he executes* a change of gear” (col. 4, line 53);
- “fuel utilization *to be expected*” (col. 5, line 7);
- “which *would be* obtained” (col. 5, line 19);
- “the fuel consumption difference ΔQ is generated ... by subtracting the fuel consumption value $Q_{U/D}$ computed ... from the measured value Q , this output signal, corresponding directly to the fuel saving which *can be* obtained per unit of time, being displayed to the driver” (col. 9, line 1);
- and elsewhere.

With respect, the rejection errs at page 2, line 6 of ¶ 2, in stating that Strifler discloses “amount of fuel consumed *after* the operation of the vehicle is performed,” because only present and future fuel consumption is measured or calculated by Strifler.

The Examiner is invited to consider that Strifler not only teaches displaying a future or predicted value—it also teaches against displaying the instantaneous or present-time fuel consumption rate. At col. 1, line 40, Strifler describes a prior-art system displaying the instantaneous fuel consumption along with recommendations for gear-shifting, and, at col. 1, line 64, Strifler goes on to state, “Notwithstanding a quite significant fuel saving, which can be obtained ... the known system nevertheless has the disadvantage that, as a result of the continuous [present-time] fuel consumption ... the driver overrates the importance [and] is misled.” Strifler

says that the prior-art system leads to actual reductions in fuel efficiency on a per-mile basis (col. 2, line 16). Strifler refers to the instantaneous fuel consumption as “Q” (col 8, line 32) and uses it in calculating, as is mentioned in the quotes above.

(2) Strifler states that its disclosed system applies only to big trucks (col. 1, line 22) and it discloses only one operation that affects fuel mileage, namely, gear shifting. Strifler does not mention differences in fuel consumption due to acceleration, braking, and speeding, and it is believed that the features of claims 2-4, that recite these features, are not anticipated.

With respect, the Examiner errs in asserting disclosure of operations other than gear shifting as a basis of fuel consumption (page 3 of the Office Action). The Applicant notes that there is no specific citation to the text, the Examiner citing only to whole columns and not to lines. Specific citations are requested if the rejection is to be maintained.

[3-4] Claim 7 was rejected under § 103(a) as unpatentable over Strifler in view of Ehlbeck '021. This rejection is respectfully traversed. The Applicant's specification at ¶[0111] states that racing takes place with the vehicle stationary, i.e., it is racing the engine only. The Examiner asserts that Ehlbeck discloses detection of fuel consumption “when the vehicle is racing, i.e. dragging.” This appears to the Applicant to be an assertion regarding a vehicle in motion, either when engaged in drag racing or when experiencing mechanical friction due to vehicle motion (two possible interpretations of “dragging”). Thus, the asserted disclosure appears to be contrary to the claim language.

There is no citation to help the Applicant locate the asserted disclosure among the 30 columns of text, and thereby determine the intended application of this reference as to “dragging.” The Applicant respectfully requests a citation, by column and line number, of the asserted disclosure of dragging, so that the Applicant can respond to the rejection.

The asserted motivation for combining the references is respectfully traversed.

[5] Claims 8, 19, and 20 were rejected under § 103(a) as unpatentable over Strifler in view of Horgan '617. This rejection is respectfully traversed.

Horgan in the cited columns discloses displaying and recording "vehicle operating parameters," but this general term is not seen to anticipate either the claimed ranking of drivers or the claimed frequency of operations. The Examiner is requested to point out specific disclosures by line number as well as column number.

[6] The allowance of claims 9-15, previously amended to be in allowable form, is noted.

The Applicant solicits the Examiner's consideration of the arguments and amendments above, and allowance of all the claims.

Respectfully submitted,



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